

B. REMARKS

The Examiner is thanked for the performance of a thorough search. By this amendment, Claims 4, 17-23 and 33 have been canceled and Claims 1, 5, 13 and 24 have been amended. Hence, Claims 1-3, 5-16, 24-32 and 34-39 are pending in this application. The amendments to the claims do not add any new matter to this application. All issues raised in the Office Action mailed December 17, 2004 are addressed hereinafter.

DEFECTIVE OATH/DECLARATION

The oath or declaration was deemed to be defective on the basis that the signatures were not dated. A new oath or declaration complying with 1.67(a) has been requested.

It is respectfully submitted that the signed declarations filed in the USPTO on November 30, 2001 with the Response to Notice to File Missing Parts are valid and acceptable for at least two reasons. First, 37 CFR § 1.63 does not require that an oath or declaration be signed. Second, the USPTO no longer requires a new declaration where the date of execution has been omitted from a declaration. See MPEP § 602.05.

In view of the foregoing, it is respectfully submitted that the declarations on file satisfy all applicable requirements. Accordingly, reconsideration and withdrawal of the requirement that a new oath or declaration be submitted is respectfully requested.

REJECTION OF CLAIMS 13 AND 20 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 13 and 20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The stated basis for this rejection is that there are no “third instructions” to give basis for “fourth instructions”.

This rejection is now moot with respect to canceled Claim 20. Claim 13 has been amended to change “fourth instructions” to “third instructions”. In view of this amendment, reconsideration withdrawal of the rejection of Claim 13 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

REJECTION OF CLAIMS 1-4 UNDER 35 U.S.C. § 102(e)

Claims 1-4 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Pothapragada et al.*, U.S. Patent No. 6,389,432 (hereinafter “*Pothapragada*”). This rejection is now moot with respect to canceled Claim 4. It is respectfully submitted that Claims 1-3, as amended, are patentable over *Pothapragada* for at least the reasons provided hereinafter.

CLAIM 1

Claim 1, as amended, is directed to a computer-implemented method of selectively allocating storage to a processor that recites:

“receiving a request to allocate storage to the processor; and
configuring a virtual storage layer to logically associate one or more logical units from
among one or more storage units to the processor by
configuring a gateway in the virtual storage layer to map the one or more logical
units to a boot port of the processor, and
configuring the one or more storage units to give the processor access to the one
or more logical units.”

It is respectfully submitted that Claim 1 is patentable over *Pothapragada* because Claim 1 recites one or more limitations that are not taught or suggested by *Pothapragada*. For example, it is respectfully submitted that the Claim 1 limitation of “configuring a virtual storage layer to logically associate one or more logical units from among one or more storage units to the processor” by “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor” is not taught or suggested by *Pothapragada*.

Pothapragada describes a system for managing storage space in storage devices that involves matching storage requests with available storage based upon criteria specified in the storage requests. The Office Action asserted that the aforementioned Claim 1 limitations are taught by *Pothapragada* at Col. 2, lines 4-38 and at Col. 7, lines 19-55. These portions of *Pothapragada* describe how a request for storage is processed. When a request for storage is received from a requestor, a volume manager allocates and assigns a LUN to an available portion of a storage device and then commands a SAN switch to connect the requestor to the portion of the storage device associated with the LUN. *Pothapragada* does not in any way teach or suggest allocating storage to a processor by mapping logical units to a boot port of the processor. There is no mention or suggestion in *Pothapragada* that connecting a requestor to a storage device via a SAN switch involves mapping logical units to a boot port of the processor. There is also no mention or suggestion that this is achieved by configuring a gateway in a virtual storage layer. It is therefore respectfully submitted that at least the Claim 1 limitation “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor” is not taught or suggested by *Pothapragada* and that Claim 1 is therefore patentable over *Pothapragada*.

CLAIMS 2 AND 3

Claims 2 and 3 depend from Claim 1 and include all of the limitations of Claim 1. It is therefore respectfully submitted that Claims 2 and 3 are patentable over *Pothapragada* for at least the reasons set forth herein with respect to Claim 1. Furthermore, it is respectfully submitted that Claims 2 and 3 recite additional limitations that independently render them patentable over *Pothapragada*.

In view of the foregoing, it is respectfully submitted that Claims 1-3 are patentable over *Pothapragada*. Accordingly, reconsideration and withdrawal of the rejection of Claims 1-3 under 35 U.S.C. § 102(e) as being anticipated by *Pothapragada* is respectfully requested.

REJECTION OF CLAIMS 1-10, 14-17 AND 21-39 UNDER 35 U.S.C. § 102(e)

Claims 1-10, 14-17 and 21-39 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Blumenau et al.*, U.S. Patent No. 6,421,711 (hereinafter “*Blumenau*”). This rejection is now moot with respect to canceled Claims 4, 17, 21-23 and 33. It is respectfully submitted that Claims 1-3, 5-10, 14-16, 24-32 and 34-39, as amended, are patentable over *Blumenau* for at least the reasons provided hereinafter.

CLAIM 1

Claim 1, as amended, is directed to a computer-implemented method of selectively allocating storage to a processor that recites:

“receiving a request to allocate storage to the processor; and
configuring a virtual storage layer to logically associate one or more logical units from
among one or more storage units to the processor by
configuring a gateway in the virtual storage layer to map the one or more logical
units to a boot port of the processor, and
configuring the one or more storage units to give the processor access to the one
or more logical units.”

It is respectfully submitted that Claim 1 is patentable over *Blumenau* because Claim 1 recites one or more limitations that are not taught or suggested by *Blumenau*. For example, it is respectfully submitted that the Claim 1 limitation of “configuring a virtual storage layer to logically associate one or more logical units from among one or more storage units to the processor” by “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor” is not taught or suggested by *Blumenau*.

Blumenau describes a storage controller that is capable of providing a plurality of virtual ports to a plurality of hosts and routing storage access requests from a single physical port to the virtual ports. The Office Action asserted that the Claim 1 limitation “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor” is taught by *Blumenau* at Col. 32, line 13 through Col. 33, line 17. This portion of *Blumenau* describes how a logical volume in a storage subsystem may be used as a boot disk to increase the reliability of a host. The approach for using a logical volume in a storage subsystem as a boot disk is described in the context of using a mapping driver invoked by a host operating system. There is no mention or suggestion of mapping a logical unit to a boot port of the processor for which storage is being allocated. Furthermore, there is no mention or suggestion of configuring a gateway in a virtual storage layer to perform the mapping. It is therefore respectfully submitted that the Claim 1 limitation “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor” is not taught or suggested by *Blumenau* and that Claim 1 is therefore patentable over *Blumenau*.

CLAIMS 2, 3, 5-10, 14-16 AND 34-36

Claims 2, 3, 5-10, 14-16 and 34-36 depend from Claim 1 and include all of the limitations of Claim 1. It is therefore respectfully submitted that Claims 2, 3, 5-10, 14-16 and 34-36 are patentable over *Blumenau* for at least the reasons set forth herein with respect to Claim 1. Furthermore, it is respectfully submitted that Claims 2, 3, 5-10, 14-16 and 34-36 recite additional limitations that independently render them patentable over *Blumenau*.

CLAIM 24

Claim 24, as amended, is directed to an apparatus for defining and deploying a networked computer system that recites:

“a processor;
a computer-readable medium accessible to the processor and storing a textual representation of a logical configuration of the networked computer system, wherein the textual representation conforms to a structured markup language; one or more sequences of instructions stored in the computer-readable medium and which, when executed by the processor, cause the processor to carry out the steps of:
receiving a request to associate storage, wherein the request is received at a virtual storage layer that is coupled to a plurality of storage units to a particular host processor, wherein the request specifies an amount of requested storage;
mapping one or more logical units from among the plurality of storage units having the requested amount of storage to a standard boot port of the particular host processor by reconfiguring the virtual storage layer to logically couple the one or more logical units to the boot port of the particular host processor.”

It is respectfully submitted that Claim 24 recites one or more limitations that are not taught or suggested by *Blumenau*. For example, it is respectfully submitted that the Claim 24 limitation of a computer-readable medium “storing a textual representation of a logical configuration of the networked computer system, wherein the textual representation conforms to a structured markup language” is not taught or suggested by *Blumenau*. The Office Action asserted that this limitation is taught by *Blumenau* at Col. 31, lines 9-61. This portion of *Blumenau* describes managing configuration information for the volumes accessible to hosts. The format or structure of the configuration information is not described and there is no teaching or suggestion that the configuration information conforms to a structured markup language. It is therefore respectfully submitted that the Claim 24 limitation “storing a textual representation of a

logical configuration of the networked computer system, wherein the textual representation conforms to a structured markup language” is not taught or suggested by *Blumenau*.

Furthermore, the Claim 24 limitation “mapping one or more logical units from among the plurality of storage units having the requested amount of storage to a standard boot port of the particular host processor by reconfiguring the virtual storage layer to logically couple the one or more logical units to the boot port of the particular host processor” is similar to limitations recited in Claim 1 and for reasons set forth herein with respect to Claim 1, this limitation is also not taught or suggested by *Blumenau*.

In view of the foregoing, it is respectfully submitted that Claim 24 recites one or more limitations that are not taught or suggested by *Blumenau* and is therefore patentable over *Blumenau*.

CLAIMS 25-32

Claims 25-32 recite limitations similar to Claim 1, except in the context of systems. It is therefore respectfully submitted that Claims 25-32 are patentable over *Blumenau* for at least the reasons set forth herein with respect to Claim 1.

CLAIM 37

Claim 37 is directed to a method of selectively allocating storage to a processor that recites:

“receiving a symbolic definition of a virtual server farm that includes a storage definition; based on the storage definition, creating a request to allocate storage to the processor; and configuring a virtual storage layer to logically associate one or more logical units from among one or more storage units to the processor.”

It is respectfully submitted that Claim 37 is patentable over *Blumenau* because Claim 37 recites one or more limitations that are not taught or suggested by *Blumenau*. For example, it is respectfully submitted that using a symbolic definition of a server farm to selective allocate storage to a processor as recited in Claim 37 is not taught or suggested by *Blumenau*. The Office Action asserted that the “symbolic definition of a server farm” recited in Claim 37 is taught by the text in *Blumenau* at Col. 21, line 16 through Col. 22, lines 63, relating to LUN volume numbers. This portion of *Blumenau* describes how LUNs are mapped to logical volume numbers and relates exclusively to the storage context. There is no teaching or suggestion of processing resources of any kind, let alone servers, server farms, virtual server farms or a symbolic definition of a virtual server farm, as recited in Claim 37. It is therefore respectfully submitted that this portion of *Blumenau* does not teach or suggest using a symbolic definition of a server farm to selective allocate storage to a processor as recited in Claim 37 and that Claim 37 is therefore patentable over *Blumenau*.

CLAIMS 38 AND 39

Claims 38 and 39 depend from Claim 37 and include all of the limitations of Claim 37. It is therefore respectfully submitted that Claims 38 and 39 are patentable over *Blumenau* for at least the reasons set forth herein with respect to Claim 37. Furthermore, it is respectfully submitted that Claims 38 and 39 recite additional limitations that independently render them patentable over *Blumenau*.

In view of the foregoing, it is respectfully submitted that Claims 1-3, 5-10, 14-16, 24-32 and 34-39 are patentable over *Blumenau*. Accordingly, reconsideration and withdrawal of the rejection of Claims 1-3, 5-10, 14-16, 24-32 and 34-39 under 35 U.S.C. § 102(e) as being anticipated by *Blumenau* is respectfully requested.

REJECTION OF CLAIMS 11-13 AND 18-20 UNDER 35 U.S.C. § 103(a)

Claims 11-13 and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Blumenau* in view of *Ofer et al.*, U.S. Patent No. 6,260,109 (hereinafter “*Ofer*”). This rejection is now moot with respect to canceled Claims 18-20. It is respectfully submitted that Claims 11-13 are patentable over *Blumenau* and *Ofer*, alone or in combination, for at least the reasons provided hereinafter.

Claims 11-13 depend from Claim 1 and include all of the limitations of Claim 1. As previously set forth herein, Claim 1 includes one or more limitations that are not taught or suggested by *Blumenau*. *Ofer* was not relied upon for teaching these limitations and it is also respectfully submitted that these limitations are also not taught or suggested by *Ofer*. For example, Claims 11-13 require “configuring a virtual storage layer to logically associate one or more logical units from among one or more storage units to the processor” by “configuring a gateway in the virtual storage layer to map the one or more logical units to a boot port of the processor.”

Ofer describes an approach for providing large logical volumes that span several physical volumes. There is no description or suggestion in *Ofer*, however, of allocating storage to a processor in the manner recited in Claims 11-13. It is therefore respectfully submitted that Claims 11-13 are not taught or suggested by *Blumenau* and *Ofer*, alone or in combination, and are patentable over *Blumenau* and *Ofer*. Accordingly, reconsideration and withdrawal of the rejection of Claims 11-13 under 35 U.S.C. § 103(a) as being unpatentable over *Blumenau* in view of *Ofer* is respectfully requested.

CONCLUSION

It is respectfully submitted that all of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If there are any additional charges, please charge them to Deposit Account No. 50-1302.

The Examiner is invited to contact the undersigned by telephone if the Examiner believes that such contact would be helpful in furthering the prosecution of this application.

Respectfully submitted,

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CERTIFICATE OF MAILING

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on February 23, 2005



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